What is claimed:

1. A process for the enhanced production of pantothenate, comprising culturing a microorganism having a deregulated methylenetetrahydrofolate (MTF) biosynthetic pathway, under conditions such that pantothenate production is enhanced.

2. A process for the enhanced production of pantothenate, comprising culturing a microorganism having

(i) a deregulated pantothenate biosynthetic pathway, and

(ii) a deregulated methylenetetrahydrofolate (MTF) biosynthetic pathway,

under conditions such that pantothenate production is enhanced.

3. The process of claim 2, wherein said microorganism has at least two pantothenate biosynthetic enzymes deregulated.

4. The process of claim 2, wherein said microorganism has at least three pantothenate biosynthetic enzymes deregulated.

5. The process of claim 2, wherein said microorganism has at least four pantothenate biosynthetic enzymes deregulated.

6. The process of claim 5, wherein said microorganism has a deregulated ketopantoate hydroxymethyltransferase, a deregualted ketopantoate reductase, a deregulated pantothenate synthetase and a deregulated aspartate-α-decarboxylase.

7. The process of any one of claims 1 to 6, wherein said microorganism further has a deregulated isoleucine-valine (*ilv*) biosynthetic pathway.

8. The process of claim 7, wherein said microorganism has at least two isoleucine-valine (*ilv*) biosynthetic enzymes deregulated.

9. The process of claim 7, wherein said microorganism has at least three isoleucine-valine (*ilv*) biosynthetic enzymes deregulated.

10. The process of claim 9, wherein said microorganism has a deregulated acetohydroxyacid acid synthetase, a deregulated acetohydroxyacid isomeroreductase, and a deregulated dihydroxyacid dehydratase.

11. The process of any one of claims 1 to 10, wherein the microorganism has at least one MTF biosynthetic enzyme deregulated.

12. The process of claim 11, wherein the microorganism has a deregulated *glyA* gene.

13. The process of claim 11, wherein the microorganism has a deregulated *serA* gene.

14. The process of claim 11, wherein the microorganism has a deregulated *glyA* gene and a deregulated *serA* gene.

15. The process of claim 12 or 14, wherein the microorganism has a mutated, deleted or disrupted *purR* gene.

16. A process for the enhanced production pantothenate, comprising culturing a microorganism having a deregualted pantothenate biosynthetic pathway, a deregulated isoleucine-valine (*ilv*) biosynthetic pathway, and a deregulated methylenetetrahydrofolate (MTF) biosynthetic pathway deregulated, such that production of pantothenate is enhanced.

17. A process for the production pantothenate, comprising culturing a microorganism having a deregulated pantothenate biosynthetic pathway, a deregulated isoleucine-valine (*ilv*) biosynthetic pathway, and a deregulated methylenetetrahydrofolate (MTF) biosynthetic pathway, such that at least 50 g/L pantothenate is produced after 36 hours of culturing the microorganism.

18. The process of claim 17, comprising culturing the microorganism such that at least 60 g/L pantothenate is produced after 36 hours of culturing the microorganism.

19. The process of claim 17, comprising culturing the microorganism such that at least 70 g/L pantothenate is produced after 36 hours of culturing the microorganism.

20. A process for the production pantothenate, comprising culturing a microorganism having a deregulated pantothenate biosynthetic pathway, a deregulated isoleucine-valine (*ilv*) biosynthetic pathway, and a deregulated methylenetetrahydrofolate (MTF) biosynthetic pathway deregulated, such that at least 60 g/L pantothenate is produced after 48 hours of culturing the microorganism.

21. The process of claim 20, comprising culturing the microorganism such that at least 70 g/L pantothenate is produced after 48 hours of culturing the microorganism.

22. The process of claim 20, comprising culturing the microorganism such that at least 80 g/L pantothenate is produced after 48 hours of culturing the microorganism.

23. The process of any one of the preceding claims, wherein pantothenate production is further enhanced by regulating pantothenate kinase activity.

24. The process of claim 23, wherein pantothenate kinase activity is decreased.

25. The process of claim 24, wherein CoaA is deleted and CoaX is downregulated.

26. The process of claim 24, wherein CoaX is deleted and CoaA is downregulated.

27. The process of claim 24, wherein CoaX and CoaA are downregulated.

28. The process of any one of the above claims, wherein said microorganism is cultured under conditions of excess serine.

29. A process for producing pantothenate comprising culturing a microorganism having a deregulated pantothenate biosynthetic pathway under conditions of excess serine, such that pantothenate in produced.

30. The process of any one of the above claims, wherein said microorganism has the pantothenate biosynthetic pathway deregulated such that pantothenate production is independent of β-alanine feed.

31. The process of any one of the above claims wherein the microorganism is a Gram positive microorganism.

32. The process of any one of the above claims wherein the microorganism belongs to the genus *Bacillus*.

33. The process of any one of the above claims, wherein the microorganism is *Bacillus subtilis*.

34. A product synthesized according to the process of any one of the above claims.

35. A composition comprising pantothenate produced according to the process of any one of the above claims.

36. A recombinant microorganism for the enhanced production of pantothenate, said microorganism having a deregulated pantothenate biosynthetic pathway, and a deregulated methylenetetrahydrofolate (MTF) biosynthetic pathway.

37. A recombinant microorganism for the enhanced production of pantothenate, said microorganism having a deregulated pantothenate biosynthetic pathway, a deregulated methylenetetrahydrofolate (MTF) biosynthetic pathway, and a deregulated isoleucine-valine (*ilv*) pathway.

38. The microorganism of claim 36 or 37, further having reduced pantothenate kinase activity.

39. The microorganism of any one of claims 36-38 which is a Gram positive microorganism.

40. The microorganism of any one of claims 36-38 belonging to the genus *Bacillus*.

41. The microorganism of any one of claims 36-38 which is *Bacillus subtilis*.

42. A process for producing pantothenate comprising culturing a recombinant microorganism having:

(a) a deregulated *panB* gene;

(b) a deregulated *panD* gene; and

(c) at least one deregulated isoleucine-valine (*ilv*) biosynthetic enzyme-encoding gene;

under conditions such that at least 30 g/l pantothenate is produced after 36 hours of culturing the microorganism.

43. The process of claim 42, wherein said microorganism further has a deregulated methylenetetrahydrofolate (MTF) biosynthetic pathway and said microorganism is cultured under conditions such that at least 50 g/l pantothenate is produced after 36 hours of culturing the microorganism.

44. A process for producing pantothenate comprising culturing a recombinant microorganism having:

(a) a deregulated *panB* gene; and

(b) a deregulated *panD* gene;

under conditions of excess serine, such that at least 50 g/l pantothenate is produced after 36 hours of culturing the microorganism.

45. A process for producing pantothenate comprising culturing a recombinant microorganism having:

(a) a deregulated *panB* gene;

(b) a deregulated *panD* gene; and

(c) a deregulated methylenetetrahydrofolate (MTF) biosynthetic pathway;

under conditions of excess valine, such that at least 50 g/l pantothenate is produced after 36 hours of culturing the microorganism.

46. A process for producing pantothenate comprising culturing a recombinant microorganism having:

(a) a deregulated *panB* gene;

(b) a deregulated *panD* gene; and

(c) a deregulated *glyA* gene;

under conditions of excess valine, such that at least 50 g/l pantothenate is produced after 36 hours of culturing the microorganism.

47. A process for producing pantothenate comprising culturing a recombinant microorganism having:

(a) a deregulated *panB* gene;

(b) a deregulated *panD* gene; and

(c) a mutated, deleted or disrupted *purR* gene;

under conditions of excess valine, such that at least 50 g/l pantothenate is produced after 36 hours of culturing the microorganism.

48. A process for producing pantothenate comprising culturing a recombinant microorganism having:

(a) a deregulated *panB* gene;

(b) a deregulated *panD* gene; and

(c) a deregulated *ser*A gene;

under conditions of excess valine, such that at least 50 g/l pantothenate is produced after 36 hours of culturing the microorganism.

49. A process for producing pantothenate comprising culturing a recombinant microorganism having:

(a) a deregulated *panB* gene;

(b) a deregulated *panD* gene;

(c) a deregulated *serA* gene;

(d) a deregulated *glyA* gene; and

under conditions of excess valine, such that at least 50 g/l pantothenate is produced after 36 hours of culturing the microorganism.